



Westinghouse
Savannah River
Company

**PRESSURE RELIEF VALVE REPAIR
QUALITY CONTROL MANUAL
WSRC-IM-90-59**



*PRESSURE RELIEF VALVE
TESTING FACILITY*

Manual # ~~XXXXXX~~

Revision # 7

Date: 6/4/04

Controlled Copy



Uncontrolled Copy



STATEMENT OF AUTHORITY AND RESPONSIBILITY

A primary objective at the Savannah River Site has always been to conduct all activities with exceptionally high standards for the safety of employees and the surrounding community. The implementation of this quality control program, which controls the repair of pressure relief valves, has the total and uncompromised backing of the management of this site.

The Solid Waste Infrastructure Maintenance & Transportation Department is responsible for the inspection, testing, and reworking of pressure relief valves. The "VR" stamp will be applied only to pressure relief valves which have been stamped with an ASME "UV" symbol and have been capacity certified by the National Board of Boiler and Pressure Vessel Inspectors. In addition, the "VR" stamp shall only be applied to valves which have been disassembled, inspected, and repaired such that the valves' condition and performance are equivalent to that of new valves as required by Section VIII, Division 1 of the ASME Boiler and Pressure Vessel Code.

The Pressure Equipment Protection Committee (PEPC) establishes the rules and procedures for the use of pressure retaining items at the Savannah River Site. Jurisdictional authority has been assigned to the Chairman of the site Pressure Equipment Protection Committee per SRS Manual WSRC-1-01, charter 6.7.

The SWIM&T PEPC Coordinator is the Quality Control Coordinator for the site VR program. He is a member of the site Pressure Protection Committee and is responsible for maintaining and implementing the VR quality control system. Any disagreement concerning the implementation of this quality control system will be resolved by the General Manager of SWIM&T.



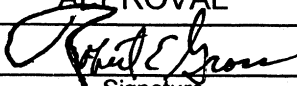
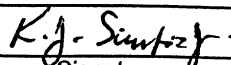

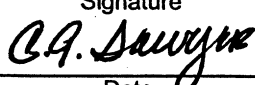
C. R. AUSTIN

Manager, Solid Waste Infrastructure Maintenance &
Transportation Department

1 23 June 04
Date

PRESSURE RELIEF VALVE REPAIR QUALITY CONTROL MANUAL
WSRC-IM-90-59

REVISION LOG

REV. No.	DATE	SECTION	DESCRIPTION	MANAGEMENT APPROVAL	NB ACCEPTANCE
6	10/1/01	ALL	NATIONAL BOARD REVIEW FOR VR RECERTIFICATION		
				Signature	Signature
				10/18/01	11/2/01
				Date	Date
7	10/1/04	ALL	Document Revised for National Board Review. Also, division heading changed from SSD to SWIM		
				Signature	Signature
				6/4/04	6/4/04
				Date	Date
				Signature	Signature
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VR-STAMP QUALITY CONTROL MANUAL
For
PRESSURE RELIEF VALVE REPAIR

APPROVED BY:

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1.0 SCOPE OF WORK

This quality control manual outlines the criteria for repairs, tests, and inspections made on pressure relief valves at the SRS 711-A Valve Shop. No welding, heat treatment, NDE will be performed. These following activities are performed in the valve shop:

- Disassembly and inspection of valves and valve parts.
- Complete repair of pressure relief valves which may include machining.
- Testing for verification of valve performance.

Repairs, for the purpose of this procedure, are defined in the National Board Inspection Code (NBIC) and performed using as a reference the SRS Engineering Standard and the SRS Y10.8 Manual, procedure 9-10069.

The site test facility is capable of testing valves thru 6x8, R orifice; from an air compressor capable of supplying 2500 Psig air thru four surge tanks with a volume of two cubic feet each. The air is then supplied to two accumulator tanks with a volume of ten cubic feet each. Liquid service valves are tested with air over water supplied thru an eight-inch dia by ten feet long J Tube supplying 1200 Psig pressure. Steam service valves shall be tested on air as allowed by NBIC, RA-2282.

A schematic of our performance test equipment shall be maintained for a period of 5 years after equipment has been excessed or retired (See attachment 1).

All performance test equipment shall be qualified in accordance with National Board requirements by bench-mark testing each test system with ASME/National Board accepted test equipment. All subsequent modifications to the test stand shall be authorized by the valve shop CTF. The CTF shall determine if re-qualification of the test stand is required. Re-qualification of the test stand will be accomplished by comparison testing. For all test stand modifications the National Board shall be contacted for information purposes. The CTF is responsible for the final statement of qualification and control of the system. Test Equipment Qualification file is maintained in Bldg. 717-A, Room 103, File Cabinet D.

1.1 Definitions and Abbreviations

SWIM&T	- Solid Waste Infrastructure Maintenance & Transportation
CTF	- Cognizant Technical Function (Person provided by SWIM&T Engineering)
E&I	- Electronics and Instrumentation
PEPC	- Pressure Equipment Protection Committee
Repair	- As defined in NBIC
WSRC	- Westinghouse Savannah River Company
Traveler	- Relief Valve Repair Checklist (Attachment 5 & 6)

1.2 Organization. (Attachment 2)

The Savannah River Site (SRS) is organized to manage several specific programs for the United States Department of Energy. Each department has a Manager which reports to a Division Manager of the site primary contractor.

The valve repair and testing (shop) supervisor is the Valve Shop Manager, reporting to the Shops Manager, reporting to the Solid Waste Infrastructure Maintenance & Transportation Department (SWIM&T) Manager. The Valve Shop Manager has responsibility for pressure relief valve testing and repairs as specified in this manual.

The Pressure Equipment Protection Committee (PEPC) establishes the rules and procedures for the use of pressure retaining items at the Savannah River Site. Jurisdictional authority has been assigned to the Chairman of the site Pressure Equipment Protection Committee per SRS Manual WSRC-1-01, Charter 6.7.

2.0 MANUAL CONTROL

- 2.1 SWIM&T Engineering maintains the VR Program for the Savannah River Site and is responsible for Quality Control of the VR program.
- 2.2 SWIM&T Valve Shop Manager or SWIM&T Engineering may prepare revisions to this Quality Control Manual.
- 2.2 All revisions shall be reviewed and approved by SWIM&T engineering prior to being submitted to the National Board for acceptance.
- 2.3 SWIM&T Engineering will review all revised sections of the ASME Code, addenda and the NBIC. The details of this review shall be recorded on the "VR Code Review Log," (See Attachment 3).
- 2.4 Revisions to the Quality Control Manual shall be noted on the Revision Log (See page II). The header of all pages shall show revision number and revision date.
- 2.5 The VR-Stamp CTF will submit revisions to the National Board for acceptance prior to implementation. After National Board acceptance the CTF will issue revisions to all controlled manual holders, including the National Board.
- 2.6 A log of controlled manual holders is maintained by the CTF.
- 2.7 Controlled manuals will be marked "controlled", marked and numbered.

3.0 DOCUMENT CONTROL

- 3.1 Only the original valve manufacturer's critical parts will be used for replacement. Documentation shall be provided to ensure OEM parts are being used. The valve shop relies on the Manufacturer or his authorized vendor to ensure we have the latest drawings, specifications, instructions for repair, inspection and testing.

- 3.2 The CTF Engineer is responsible for retaining the drawings and specification. These documents are to be retained in the valve shop files as current or supplanted. They will be retrieved by the valve shop mechanic for use on a specific job then returned to the file upon completion. Upgrades will be maintained in a file by the valve mechanics.
- 3.3 The CTF will review documentation annually for latest revision. A log will be maintained by the CTF indicating an annual review has been completed.
- 3.4 If a technical specification is unavailable, the manufacturer shall be contacted to obtain data required for completion of the repair. If information cannot be obtained, the shop supervisor will request the operating area to replace the valve with one for which a manual can be obtained.

4.0 PERSONNEL TRAINING, QUALIFICATION, AND CERTIFICATION

- 4.1 The Shop Manager shall ensure that all personnel making repairs to pressure relief valves are qualified and knowledgeable.
- 4.2 The following items shall be completed and documented on the "Relief Valve Repair Mechanic Training Record", See attachment 4 by each Valve Repair Mechanic as a requisite for qualification prior to performing valve repairs. This record will be maintained in the valve shop.
 - 4.2.1 The Valve Repair Mechanics shall annually review applicable portions of the ASME Code Section VIII.
 - 4.2.2 The Valve Repair Mechanics shall attend an annual review of the quality control manual presented by the Shop Manager or the Valve Shop CTF. This shall include an overview of the latest revision of NBIC.
 - 4.2.3 Valve Repair Mechanics shall be trained in the use of air and water test systems, including portable testing devices.
 - 4.2.4 Valve Repair Mechanics shall be trained in the use, as a reference, the National Board publication NB-18. (Red Book)
 - 4.2.5 Valve Repair Mechanic shall complete one vendor training course on valve overhaul every two years maximum. This training may be held on or off site.

5.0 MATERIAL AND PART CONTROL

All critical replacement parts will be purchased, and the required certifications obtained, from the original valve manufacturer or their authorized representative. Critical parts are those which affect flowpath, capacity, or pressure retaining. The valve shop mechanics notify the procurement focus group and provide them with the OEM part numbers and other detailed information as necessary. No CMTRs are required. The receiving department will accept the vendor shipment, verified by the vendor part number. The buyer will then match the paperwork to the P.O. and then deliver the incoming material to the focus group buyer. This person will then check the contents to ensure the parts received are exactly as described in the

original purchase request. This focus group buyer will then deliver valves and components to the valve shop or the valve CTF as directed.

6.0 REPAIR AND INSPECTION PROGRAM

6.1 Responsibilities

The Shop Manager will have the overall responsibility to ensure that relief valves are repaired in accordance with National Board Inspection Code (NBIC).

6.2 Repair and Inspection Procedure

- 6.2.1 Initial inspection is defined as only those actions required to verify the operation of the valve to be within code requirements without disassembly. This includes a test to verify set pressure and reseating action.
- 6.2.2 Repair as recommended in Appendix E of the NBIC.
- 6.2.3 Only qualified Valve Repair Mechanics will work on 'UV' stamped pressure relief valves. The Shop Manager shall be responsible for ensuring that technicians are qualified per section 4.0.
- 6.2.4 All Code stamped valves arriving at the shop will be logged in and then work control personnel will assembly a work package/traveler. The valve will then be inspected by valve shop mechanics to determine that the nameplate and identification tags are attached and correct per Y1-7 Manual Section 8. The Valve Repair Mechanic will then disassemble and clean the valve and inspect all parts to determine which repairs or replacement parts are needed. The mechanic's findings will be noted in the history section of the Passport Work Order History Attribute section and the WSRC Pressure Relief Valve Repair Checklist, also known as the Traveler (attachments 5 and 6). Received parts will be inspected and accepted by the valve shop mechanics and placed with the work package traveler to be installed during the repair. Springs will be identified by their markings, tagging, or physical characteristics.
- 6.2.5 Each VR valve shall be assigned a unique identification called a Repair (R) number. This number shall appear on the VR nameplate. The repair work traveler will accompany the valve throughout the valve repair process. A copy of the WSRC Pressure Relief Valve Repair Checklist shall be filed by R number and shall be retained for 5 years or the life of the valve whichever is greater.

7.0 TESTING, SETTING, AND SEALING

All valves shall be tested, set and sealed as specified by the ASME Code Section VIII, Division 1, and in accordance with the National Board "VR" program requirements.

7.1 Testing Requirements

7.1.1 The test media for valve testing shall be as follows:

- a. ASME Section VIII valves which are in steam service shall be tested by air with the application of appropriate temperature correction factors supplied by each valve manufacturer. This shall be done as allowed in NBIC, RA-2282.
- b. Valves used in gas or vapor service shall be tested by air and valves used in liquid service shall be tested by water.

7.1.2 Gauges used in any test shall have an adequate range per ASME Section VIII, Division 1, paragraph UG 102. Test gauges shall have a minimum division of 1% of full scale reading. An alternate gauge shall be used for cross checking prior to testing valve.

7.1.3 Hydrostatic testing of the valve body is only necessary if examination of the valve reveals any suspected nonconformance, i.e. distortion, damage, or signs of unauthorized repair.

7.2 Testing and Setting Procedure

7.2.1 The set pressure test for each valve will be performed according to the individual valve manufacturer's recommendations and the ASME code.

7.2.2 Resetting of valve set pressure shall be in accordance with the manufacturer's spring design specifications.

7.2.3 Verification of corrections for set differentials between steam and air (RA2282) will be obtained from the OEM. These corrections shall be applied to the set pressure in accordance with the individual valve manufacturer's recommendations for steam service pressure relief valves.

7.3 Verification of Seat Tightness

Seat tightness tests shall be performed in accordance with manufacturer's requirements. If manufacturer's requirements do not exist, then API 527 will be used.

7.4 Valve Sealing

After all inspection, testing, and reassembly are complete, the valve cap, bonnet, and all external adjustments will be secured by means of a wire. Sealing shall be as required for the original assembler or manufacturer in ASME Section VIII, Division 1, paragraph UG-136(a)(7). An impression will be made on the seal to indicate the repairer ("SRS").

7.4.1 The VR Stamp is under the control of the valve shop CTF. The stamp will be kept in a locked box except during use.

8.0 NAMEPLATES

- 8.1 The manufacturer's original nameplate is a metal plate attached to the valve.
- 8.2 If the information on the manufacturer's original nameplate or stamping is partially illegible and the valve characteristics can be determined by existing flange stampings or other permanent markings on the valve, then a duplicate nameplate should be obtained from valve manufacturer before valve is considered repaired and returned to service. If time does not permit, the original manufacturer's nameplate may be augmented by a nameplate stamped "duplicate" which contains all the information of original nameplate except the "UV" symbol and the NB mark. The duplicate nameplate shall be marked Section VIII.
- 8.3 If the original valve manufacturer's nameplate is missing, no repair will be made until the valve can be positively identified by relief valve supervision or Valve Shop CTF and original nameplate data can be obtained from the original valve manufacturer and/or existing records on site. Valves that can be positively identified will be equipped with a duplicate nameplate as described in 8.2 and 8.5.
- 8.4 Valves that cannot be positively identified shall be considered operationally indeterminate and shall be discarded. Use of any of the components from such valves as spare parts is not authorized.
- 8.5 The repair nameplates shall be as required by the NBIC. They are metal tags affixed to valves that are repaired in the repair shop. The plate will contain, as a minimum, the following information which shall include (1) the name of the repair organization "Savannah River Site" preceded by the words "repaired by", (2) The "VR" repair symbol stamp and the VR Certificate Number 326. (3) Shop work repair number, (4) Date of repair, and (5) Set Pressure. When the set pressure is changed, the tag shall include the new capacity quantity and units. The new capacity shall be based on that for which the valve was originally certified. The valve's old set pressure and capacity shall be marked out but left legible on the original nameplate or stamping. The nameplate will be removed and destroyed each time the valve is repaired and a new nameplate attached.
- 8.6 The nameplate will be securely attached to the valve after every repair by the Valve Repair Technician.

9.0 CALIBRATION OF MEASUREMENT AND TEST EQUIPMENT

This procedure outlines the general requirements for the calibration of measuring and testing equipment by SRS personnel

- 9.1 All measuring calipers and testing equipment used by the valve shop for VR repair shall be designated as M&TE. M&TE calibration shall be performed by authorized M&TE personnel using approved procedures, or work documents that ensure compliance with applicable American National Standards Institute (ANSI) or other accepted standards such as NIST. M&TE calibrations at the Savannah River Site are governed by WSRC 1Q Quality Assurance Manual, Procedure 12-1

- 9.2 Before using any M&TE, the Valve Repair Mechanic is responsible for inspecting the item, ensuring that it has a current calibration sticker and that it has no physical indications of damage. The mechanic will ensure the calibration sticker affixed to the item or its case shall uniquely identify M&TE items and state the next required calibration date.
- 9.3 If the M&TE is damaged or the calibration is held in question for any reason, the item shall be replaced or re-calibrated before use.
- 9.4 All M&TE test gauges and calipers shall be calibrated on a regular basis within a maximum 1-year frequency.

10.0 CONTROL OF NONCONFORMING ITEMS

A Nonconformance Report (Attachment 7) is written to document the occurrence of any item, system, or document that is not in compliance with applicable codes, standards, regulations, etc. Any SRS employee may initiate a NCR. All NCR dispositions on Pressure Relief devices shall be approved by the PEPC Relief Valve Technical Coordinator.

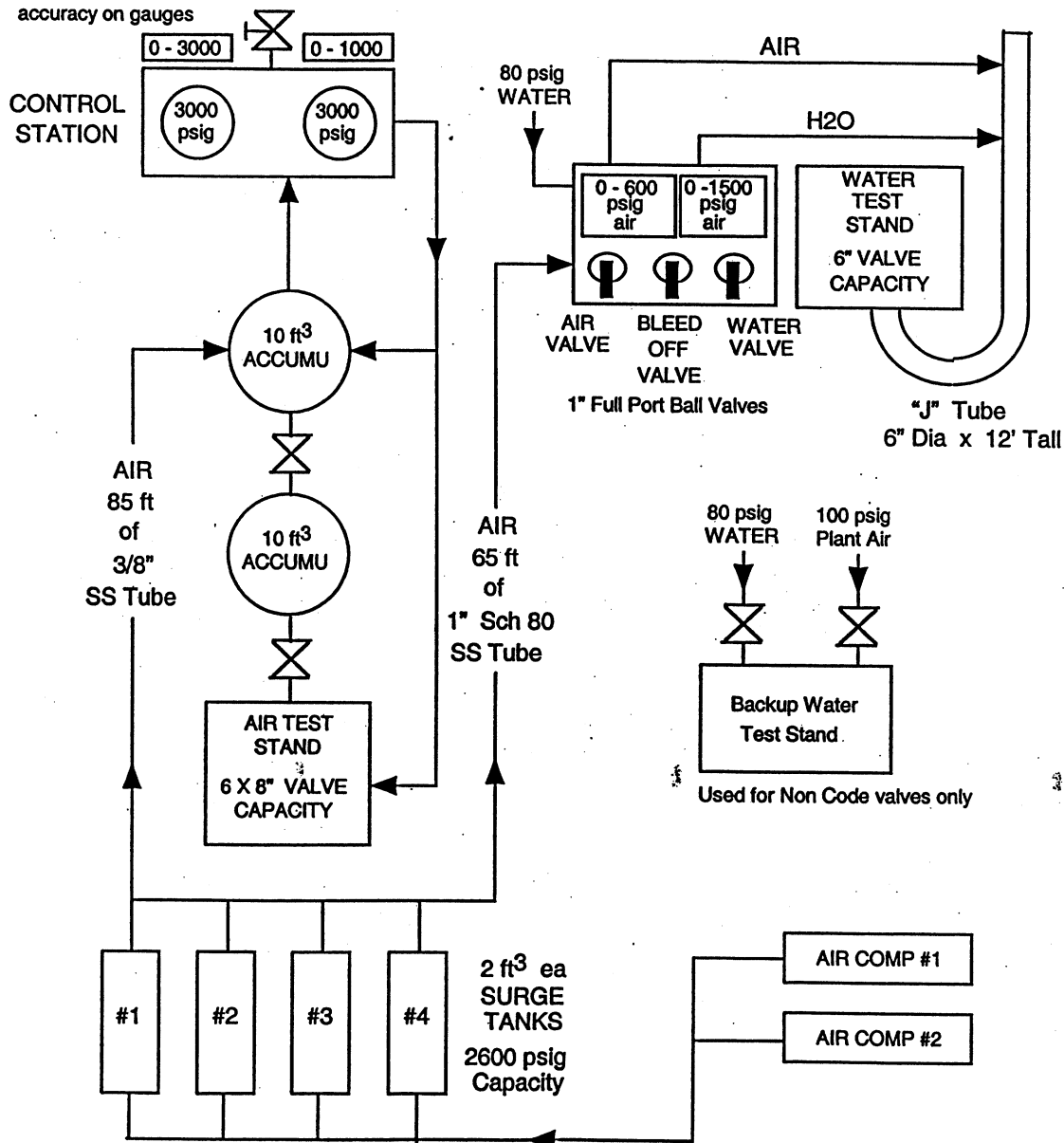
10.1 NONCONFORMING ITEMS:

When a new valve/component is found to be nonconforming, a QA hold tag is attached to the item. The item is then segregated in a designated holding area within the valve shop. Final disposition of the NCR is the responsibility of the valve owner.

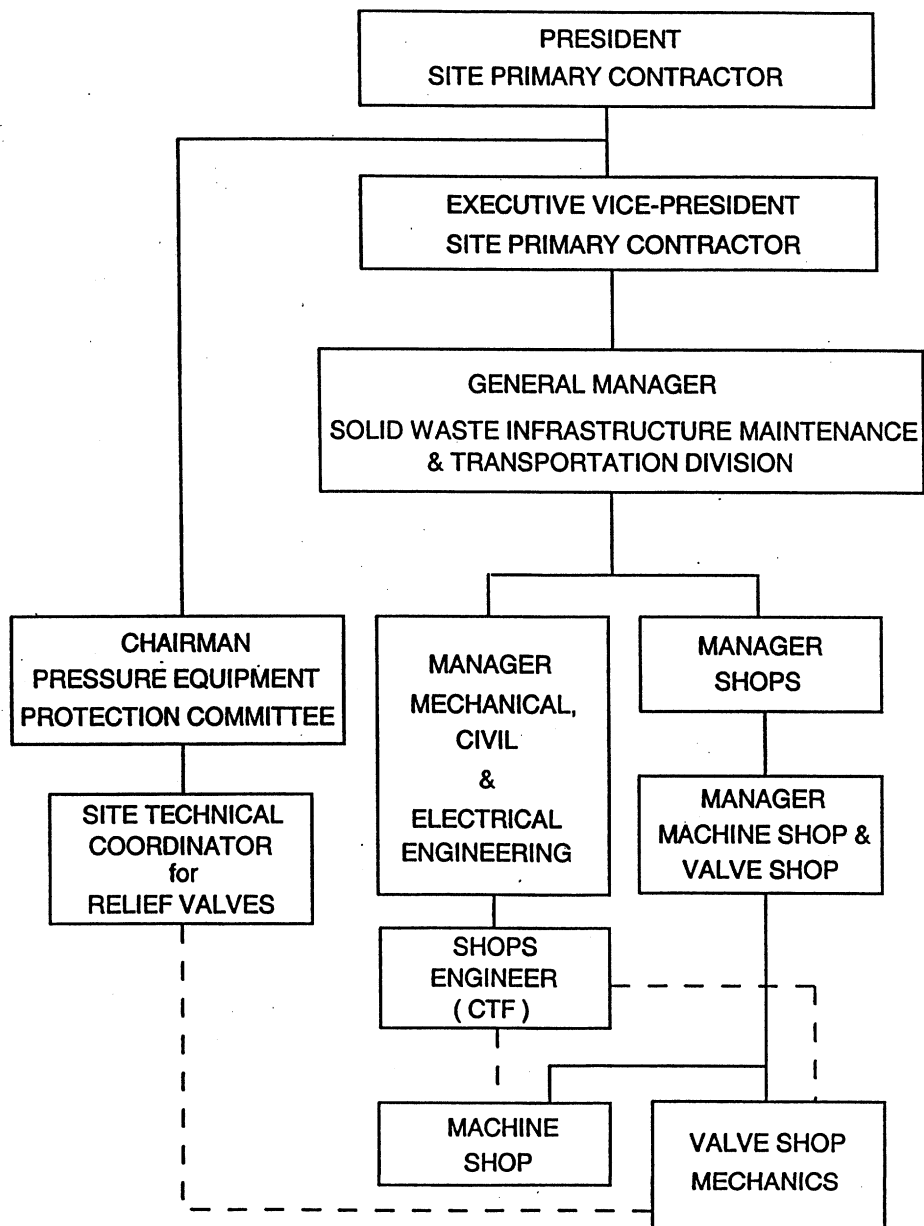
11.0 ATTACHMENTS

- 1 Testing Equipment Schematic
- 2 Organization Chart
- 3 VR Code Review Log
- 4 Valve Repair Mechanic Training Record
- 5 Spring Loaded Valve Repair Checklist (Traveler)
- 6 Pilot Operated Valve Repair Checklist (Traveler)
- 7 Non Conformance Report

TEST EQUIPMENT SCHEMATIC

0.01% Full Scale
accuracy on gauges

ORGANIZATION CHART



CATEGORY 3

MANUAL: WSRC-IM-90-59
ATTACHMENT 3
REV 7
EFFECTIVE DATE: 6/4/04
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* Includes ASME Code New Issues and Addenda, NBIC & Annual QC Manual Review

WESTINGHOUSE SAVANNAH RIVER CO
SWIM ADMINISTRATIVE PROCEDURE (U)
CATEGORY 3

MANUAL: WSRC-IM-90-59
ATTACHMENT 4
REV 7
EFFECTIVE DATE: 6/4/04
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RELIEF VALVE REPAIR MECHANIC TRAINING RECORD

WSRC Savannah River Site
Valve Repair Technician Annual Training Record

EMPLOYEE James Fulmer User ID W6142

Initial Each Completed Read and Sign:

<u>N/A</u>	ASME Boiler and Pressure Vessel Code, Section VIII, Division 1
<u>IF</u>	UG 125 - Pressure Relief Devices General Information
<u>IF</u>	UG 126 - Pressure Relief Valves
<u>IF</u>	UG 128 - Liquid Relief Valves
<u>IF</u>	UG 129 - Marking
<u>IF</u>	UG 130 - Use of Code Symbol Stamp
<u>IF</u>	UG 131 - Certification of Capacity of Pressure Relief Valves
<u>IF</u>	UG 133 - Determination of Pressure Relief Valve Requirements
<u>IF</u>	UG 134 - Pressure Setting of Pressure Relief Devices
<u>IF</u>	UG 135 - Installation
<u>IF</u>	UG 136 - Minimum Requirements for Pressure Relief Valves
<u>IF</u>	VR Quality Control Manual (WSRC-IM-90-59)
<u>IF</u>	Pressure Equipment Protection Requirements WSRC-TM-95-1, Section 5.4.2

I have completed all of the above read and sign items required:

[Signature]
Employee Signature

6-6-03
Date

[Signature]
711-A Valve Shop Manager, Signature

6/13/03
Date

WESTINGHOUSE SAVANNAH RIVER CO

SWIM ADMINISTRATIVE PROCEDURE (U)

CATEGORY 3

MANUAL: WSRC-IM-90-59

ATTACHMENT 5

REV 7

EFFECTIVE DATE: 6/4/04

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RELIEF VALVE REPAIR CHECKLIST
(For Spring Loaded Valves)

IDP NO. 28899061

REPAIR NO. R 7235

SAVANNAH RIVER SITE VR PROGRAM
PRESSURE RELIEF VALVE REPAIR CHECKLIST
FOR ASME SECTION VIII SPRING LOADED VALVES

DATE IN: 4/12/00 DATE COMPLETED: 5/9/00 WORK REQUEST: 138825

PREVIOUS REPAIR NO. (attached checklist): R N/A

1.0 VISUAL INSPECTION AS RECEIVED BY: JF 15/9/00

MANUFR: KUNKLE MODEL: 6182 FE SERIAL: None

SIZE: 1" ORIGINAL SET PRESSURE: 125 PSI

CAPACITY: 828 SCFM CODE: UV SEALS: 2

REPAIR ITEMS: Leaking, Trash in seats

2.0 DISASSEMBLY BY: JF 15-9-00

COMPRESSION SCREW POSITION: 1.152"

RING 1 POSITION: Down 4 not RING 2 POSITION: Down 5 Turns

3.0 CLEANING BY: JF 15-9-00

METHOD USED: Brush Blaster

4.0 INSPECTION BY: JF 15-9-00

SPRING CONDITION: Good NOZZLE CONDITION: Good

DISK ASSEMBLY CONDITION: Good SPINDLE CONDITION: Good

GUIDE CONDITION: Good RING(S) CONDITION: Good

RING PIN(S) CONDITION: Good BELLOWS CONDITION: N/A

CONDITION OF FLANGE GASKET FACINGS: N/A

5.0 MACHINING BY: N/A N/A

DESCRIBE (attach copy of sketch / specification used in machine shop ; sketch / specification must show critical dimensions and tolerances):
N/A

6.0 LAPPING BY: JF 15-9-00

LIST SURFACES LAPPED: Nozzle + Disk

WESTINGHOUSE SAVANNAH RIVER CO
SWIM ADMINISTRATIVE PROCEDURE (U)
CATEGORY 3

MANUAL: WSRC-IM-90-59
ATTACHMENT 5
REV 7
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RELIEF VALVE REPAIR CHECKLIST
(For Spring Loaded Valves)

7.0 INSTALLATION OF ADJUSTING RINGS BY: JF 15-9-00
RING 1 POSITION: Down 4 1/2 RING 2 POSITION: Down 5 Turns

8.0 BEARING POINTS BY: JF 15-9-00
CONFIRM BEARING POINTS ARE ROUND AND TRUE: YES

9.0 TESTING (per Manual Y10.8, SOP 9-10069) BY: JF 15-9-00
TEST GAUGE ID: Q03675 CALIBRATION DUE: 5-9-00
SET PRESSURE CORRECTION FACTORS (IF APPLICABLE): N/A

SET PRESSURE: <u>126</u> PSI	RESEAT PRESSURE: <u>117</u> PSI
SET PRESSURE: <u>126</u> PSI	RESEAT PRESSURE: <u>117</u> PSI
SET PRESSURE: <u>126</u> PSI	RESEAT PRESSURE: <u>117</u> PSI

CONFIRM RINGS RESET (PER 7.0) AFTER POP: N/A

LEAK TEST: BUBBLES/MIN. ALLOWED N/A BUBBLES/MIN. ACTUAL N/A

10.0 SEALING BY: JF 15-9-00
LIST SEALS PLACED: Cup pin & ring pins

11.0 NAMEPLATE BY: JF 15-9-00
VR STAMP: YES REPAIR NO.: 7235 DATE: 5/00

FOR SET PRESSURE CHANGE:

ORIGINAL SET LINED OUT: <u>N/A</u>	NEW SET SHOWN: <u>N/A</u>
ORIGINAL CAPACITY LINED OUT: <u>N/A</u>	NEW CAPACITY SHOWN: <u>N/A</u>
NAMEPLATE ATTACHED: <u>YES</u>	

12.0 COMMENTS BY: N/A 15-9-00
N/A
N/A
N/A

REPAIRED BY: JF/mw DATE: 5-9-00

WESTINGHOUSE SAVANNAH RIVER CO
SWIM ADMINISTRATIVE PROCEDURE (U)
CATEGORY 3

MANUAL: WSRC-IM-90-59
ATTACHMENT 6
REV 7
EFFECTIVE DATE: 6/4/04
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RELIEF VALVE REPAIR CHECKLIST
(For Pilot Operated Valves)

IDP NO. 49890309

REPAIR NO. 7294

SAVANNAH RIVER SITE VR PROGRAM
PRESSURE RELIEF VALVE REPAIR CHECKLIST
FOR ASME SECTION VIII PILOT OPERATED VALVES

DATE IN: 3-6-01 DATE COMPLETED: 4-20-01 WORK REQUEST: 206722-02

PREVIOUS REPAIR NO. (attach checklist): R 6910

1.0 VISUAL INSPECTION AS RECEIVED BY: JF 1 3-6-01
MANUF: Anderson Greenwood MODEL: 43305 D12/S1 SERIAL: 90/23028
SIZE: 1" ORIGINAL SET PRESSURE: 150
CAPACITY: 446 SCFM CODE: 1/V SEALS: 1
UNUSUAL CONDITIONS: Leaking

2.0 DISASSEMBLY BY: JF 1 3-6-01
PILOT / MAIN VALVE DISASSEMBLED PER MANUFACTURER'S REFERENCE: yes

3.0 CLEANING BY: JF 1 4-20-01
METHOD USED - PILOT: Solvent + Compressed Air
METHOD USED - MAIN VALVE: Brush Blaster

4.0 INSPECTION BY: JF 1 4-20-01
PILOT:
SPRING CONDITION: Good CONDITION OF STRAINERS: not
INTERNAL COMPONENTS: Main piston seal eroded (replaced)
(LIST DAMAGE)

MAIN VALVE:
NOZZLE CONDITION: Good

PISTON / LINER CONDITION: Good

CONDITION OF FLANGE GASKET FACINGS: Good

5.0 MACHINING BY: MA 1 MA
DESCRIBE (attach copy of sketch / specification used in machine shop; sketch / specification must show critical dimensions and tolerances):
MA

WESTINGHOUSE SAVANNAH RIVER CO
SWIM ADMINISTRATIVE PROCEDURE (U)
CATEGORY 3

MANUAL: WSRC-IM-90-59
ATTACHMENT 6
REV 7
EFFECTIVE DATE: 6/4/04
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RELIEF VALVE REPAIR CHECKLIST
(For Pilot Operated Valves)

6.0 LAPPING BY: TF / 4-20-01
Initials Date
LIST SURFACES LAPPED: Nozzle

7.0 REPLACEMENT OF SORT GOODS BY: TF / 4-20-01
Initials Date
ITEMS REPLACED (PILOT): Soft Goods Kit 04.4749.763
ITEMS REPLACED (MAIN VALVE): Soft Goods Kit 06.3365.001

8.0 TESTING (per MANUAL Y10.8, SOP 9-10069) BY: TF / 4-20-01
Initials Date
TEST GAUGE ID: 404095 CALIBRATION DUE: 5-1-01
SET PRESSURE CORRECTION FACTORS (IF APPLICABLE):
SET PRESSURE: 153 PSI RESEAT PRESSURE: 148 PSI
SET PRESSURE: 153 PSI RESEAT PRESSURE: 148 PSI
SET PRESSURE: 153 PSI RESEAT PRESSURE: 148 PSI
LEAK TEST: BUBBLE/MIN. ALLOWED 40 BUBBLE/MIN. ACTUAL 0

9.0 SEALING BY: TF / 4-20-01
Initials Date
LIST SEALS PLACED: Pilot Cap

10.0 NAMEPLATE BY: TF / 4-20-01
Initials Date
VR STAMP: Yes REPAIR NO.: 7294 DATE: 4-01
FOR SET PRESSURE CHANGE
ORIGINAL SET LINED OUT: NA NEW SET SHOWN: NA
ORIGINAL CAPACITY LINED OUT: NA NEW CAPACITY SHOWN: NA
NAMEPLATE ATTACHED: Yes

11.0 COMMENTS BY: NA / NA
Initials Date
NA
NA
NA
NA

REPAIRED BY: TF / 4-20-01
Initials Date

WESTINGHOUSE SAVANNAH RIVER CO
SWIM ADMINISTRATIVE PROCEDURE (U)
CATEGORY 3

MANUAL: WSRC-IM-90-59
ATTACHMENT 7
REV 7
EFFECTIVE DATE: 6/4/04
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NON CONFORMANCE REPORT

QA Use Only Trend Code	OSR 88-12 (Rev 4-94)	Savannah River Site Nonconformance Report		Date of Report 8/5/92	NCR Number/Rev 92-NCR-06-XXX/0
				Location of Nonconformance 711-A	Page 1 of 1
Issued By (Name/Signature) V.R. MECHANIC / VR Mechanic		Reporting Department CSWE		Phone 5-8060	Date Found 8/5/92
Title UNIDENTIFIED SPRING - XYZ VALVE CO. PART NO. 335-22-1 (u)				Found By VR MECHANIC	
				Number of QA Hold Tags 1	
Specified Requirements MANUAL WSRC-IM-90-59, REV. 2, PARAGRAPH 5.3 REQUIRES. SPARE PARTS TO BE INDIVIDUALLY LABELED.					
Description of Nonconformance SPRING (CAPTION 73, ITEM 1.1) RECEIVED FROM SPARE PARTS INVENTORY HAS NO LABEL. NO MANUFACTURER'S MARKINGS ARE PRESENT ON SPRING. SPRING CANNOT BE POSITIVELY IDENTIFIED.					
Reportable to DOE? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Custodian <u>D.P. DEAKE / D.P. Deake</u> 8/3/92 Name/Signature Date					
A Validation Car No. _____ SQA? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> COF <u>B.R. HAMM / BR Hamm</u> 8/5/92 Name/Signature Date					
Disposition Rework <input type="checkbox"/> Repair <input type="checkbox"/> Use As Is <input type="checkbox"/> Reject <input checked="" type="checkbox"/> Activity NCR <input type="checkbox"/> Conditional Release: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (See Attached)					
Disposition Details DESTROY AND DISPOSE OF SPRING. REVIEW INVENTORY OF LISTED CAPTION AND ITEM NUMBER TO VERIFY CONFORMANCE TO LABELING REQUIREMENT. DISPOSE OF ALL NONCONFORMING PARTS.					
"INFORMATION ONLY"					
Disposition Written By <u>P.J. FRANCH / PJ Franch</u> CSWE 8/4/92 Name/Signature Department Date					
Disposition Approval Signatures and Dates		Custodian <u>D.P. Deake</u> 8/4/92	COF <u>BR Hamm</u> 8/4/92		
Add Other Signatures as Required		OTF (If Applicable) <u>PJ Franch</u> 8/4/92			
B					
Probable Cause and Steps to Prevent Recurrence (As Practical) VERIFY THAT INDIVIDUAL LABELING IS LISTED AS A RECEIPT INSPECTION REQUIREMENT FOR THIS CAPTION AND ITEM NUMBER.					
C Verification of Disposition and Closure Approval NONCONFORMING SPRING WAS CUT IN HALF AND DISPOSED OF. REMAINING SPARE PARTS INVENTORY IS PROPERLY LABELED.					
D Implementation Complete <u>D.P. DEAKE / D.P. Deake</u> 8/4/92 COF <u>B.R. HAMM / BR Hamm</u> 8/4/92 Custodian/Signature Date Name/Signature Date					

WESTINGHOUSE SAVANNAH RIVER CO

SWIM ADMINISTRATIVE PROCEDURE (U)

CATEGORY 3

MANUAL: WSRC-IM-90-59

ATTACHMENT 7

REV 7

EFFECTIVE DATE: 6/4/04

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NON CONFORMANCE REPORT

QA Use Only Trend Code	Back of OQR 24-12 (Rev 4-93)	Savannah River Site Nonconformance Report		Date of Report DATE WRITTEN	NCR Number/By CALL CQF FOR NO.
Issued By (Name/Signature) PERSON WRITING NCR		Reporting Department ISSUER'S DEPARTMENT		Location of Nonconformance BLDG/AREA	Page 1 of
Title UNIQUE TITLE (SPECIFIC DESCRIPTION OF ITEM, I.E., NAME, MODEL NO., SERIAL NO., EP NO., EN NO.)		Phone		Date Found	Found By PERSON FINDING ITEM
Specified Requirements THE PERSON WRITING THE NCR RECORDS THE ORIGINAL REQUIREMENTS, INCLUDING SPECIFIC DETAILS SUCH AS REFERENCE DOCUMENT NO., REVISION NO., DRAWING NO., PROCEDURE NO., PARAGRAPH NO., OR PAGE NO.					
Description of Nonconformance THE PERSON WRITING THE NCR RECORDS THE AS-FOUND CONDITION OF THE NONCONFORMANCE. THE INITIATOR'S CQF MUST APPROVE THE NONCONFORMANCE. AFTER APPROVAL BY THE CQF, THE NCR IS CONSIDERED OPEN.					
Reportable to DOE? Yes <input type="checkbox"/> No <input type="checkbox"/> Custodian _____ Name/Signature _____ Date _____					
A Validation Car No. _____ SOAQ? Yes <input type="checkbox"/> No <input type="checkbox"/> _____ Name/Signature _____ Date _____					
Disposition Rework <input type="checkbox"/> Repair <input type="checkbox"/> Use As Is <input type="checkbox"/> Reject <input type="checkbox"/> Activity NCR <input type="checkbox"/> Conditional Release <input type="checkbox"/> No <input type="checkbox"/> Yes (See Attached)					
Disposition Details THE DEPARTMENT HAVING RESPONSIBILITY FOR THE NONCONFORMING ITEM OR ACTIVITY MUST GET AGREEMENT ON THE DISPOSITION. AS A MINIMUM, THE CUSTODIAN, CTF (if applicable), AND CQF MUST APPROVE THE DISPOSITION. IF "USE AS IS" OF "REPAIR" IS SPECIFIED, AN ADEQUATE TECHNICAL JUSTIFICATION MUST BE INCLUDED HERE. AFTER THE DISPOSITION HAS BEEN APPROVED, THE NCR IS DISTRIBUTED PER IMPLEMENTING PROCEDURES. IF A CONDITIONAL RELEASE IS NEEDED, DETAILS OF THE RELEASE SHALL BE PROVIDED AS NECESSARY.					
Disposition Written By _____ Name/Signature _____ Department _____ Date _____					
Disposition Approval Signatures and Dates		Custodian	CQF		
Add Other Signatures as Required		CTF (if Applicable)			
B					
Probable Cause and Steps to Prevent Recurrence (As Practical) IF THE DEPARTMENT RESPONSIBLE FOR THE QUALITY OF AN ITEM/ACTIVITY CAN READILY DETERMINE THE PROBABLE CAUSE OF THE NONCONFORMANCE, THE INFORMATION SHOULD BE SPECIFIED HERE. IF THE DEPARTMENT RESPONSIBLE FOR THE NONCONFORMANCE CAN DETERMINE THE STEPS TO BE TAKEN TO PREVENT RECURRENCE, THESE SHOULD BE SPECIFIED HERE.					
C Custodian _____ Name/Signature _____ Date _____					
Verification of Disposition and Closure Approval WHEN THE DISPOSITION HAS BEEN COMPLETELY IMPLEMENTED, THE CUSTODIAN WILL SIGN AND THE CQF WILL REVIEW THE FORM, SIGN, AND ISSUE THE NCR, AS A MINIMUM, TO THE INITIATOR, APPROVERS, SITE QUALITY, AND CENTRAL FILES.					
D Implementation Complete _____ Custodian/Signature _____ Date _____ CQF _____ Name/Signature _____ Date _____					